

Exhibit No.:	_____
Issue(s):	Depreciation
Witness/Type of Exhibit:	Robinett/Surrebuttal
Sponsoring Party:	Public Counsel
Case No.:	EA-2018-0202

## **SURREBUTTAL TESTIMONY**

**OF**

**JOHN A. ROBINETT**

Submitted on Behalf of  
the Office of the Public Counsel

**UNION ELECTRIC D/B/A AMEREN MISSOURI**

**CASE No. EA-2018-0202**

September 28, 2018

*OPC*  
Exhibit No. 110  
Date 10/31/18 Reporter SN  
File No. EA-2018-0202



**SURREBUTTAL TESTIMONY  
OF  
JOHN A. ROBINETT  
AMEREN MISSOURI**

**CASE No. EA-2018-0202**

1 **Q. What is your name and what is your business address?**

2 A. John A. Robinett, PO Box 2230, Jefferson City, Missouri 65102.

3 **Q. By whom are you employed and in what capacity?**

4 A. I am employed by the Missouri Office of the Public Counsel ("OPC") as a Utility Engineering  
5 Specialist.

6 **Q. Have you previously provided testimony before the Missouri Public Service  
7 Commission?**

8 A. Yes.

9 **Q. What is your work and educational background?**

10 A. A copy of my work and educational experience is attached to this testimony as Schedule  
11 JAR-S-1.

12 **Q. What is the purpose of your surrebuttal testimony?**

13 A. This testimony is being filed pursuant to the Commission's *ORDER DENYING PUBLIC*  
14 *COUNSEL'S MOTION TO MODIFY PROCEDURAL SCHEDULE* issued on September  
15 12, 2018, and attached as Schedule JAR-S-2 in which the Commission issued the  
16 following statement:

17 Ameren Missouri asserts it can carry that burden [of proof] without the need  
18 to file any supplemental affidavits. Public Counsel may challenge that  
19 assertion through its surrebuttal testimony, by cross-examination of Ameren  
20 Missouri's witnesses at the hearing, and through the arguments presented in  
21 its briefs.

22 In this testimony, I will demonstrate the inconsistencies within the agreement between Staff  
23 of the Missouri Public Service Commission and Ameren Missouri. Specifically, I will be  
24 addressing paragraph 11 of both the first and second Stipulation and Agreement in Case  
25 No. EA-2018-0202 as it pertains to the depreciation clause.

1 **Q. What is the Stipulations' language on depreciation?**

2 A. The depreciation language in paragraph 11 of the first Stipulation and Agreement, states:

3 11. Depreciation: The Signatories agree that Ameren Missouri  
4 shall use the currently ordered life for wind generation in establishing the  
5 depreciation rate applicable to the facility unless, upon Commission  
6 consideration of the Company's next electric depreciation study, the  
7 Commission approves the use of a different life for setting depreciation rate.

8 **Q. Was a second Non-Unanimous Stipulation an Agreement filed on September 24, 2018?**

9 A. Yes Ameren Missouri filed a second Non-Unanimous Stipulation and Agreement on  
10 September 24, 2018 with the Missouri Industrial Energy Consumers as a signatory that was  
11 not a signatory to the first Stipulation and Agreement.

12 **Q. Did the language of the depreciation paragraph, paragraph 11, change in the second  
13 Stipulation?**

14 A. No. Language remained unchanged related to depreciation in the second Stipulation in  
15 comparison to the first Stipulation and Agreement.

16 **Q. What issues should the Commission take with this depreciation language?**

17 A. OPC has concerns with several items in this agreed to language.

18 The first issue is the phrase: "The Signatories agree that Ameren Missouri shall use the  
19 currently ordered life for wind generation in establishing the depreciation rate applicable  
20 to the facility unless." Although it may be inferred that parties agreed to use of Ameren  
21 Missouri's ordered life for wind generation instead of using another utility's ordered life  
22 for wind generation, the Stipulation and Agreement does not expressly state which utility's  
23 ordered life the Commission should consider. Kansas City Power and Light has ordered  
24 depreciation rates for the Spearville wind facilities; additionally the Commission issued an  
25 order in Case No. EO-2018-0092 authorizing a composite depreciation rate of 3.33% or a  
26 thirty year life no net salvage for wind assets as part of the Empire District Electric  
27 Company's "customer savings plan".

28 The second issue involves the second half of that quote, stating that Ameren Missouri "shall  
29 use the currently ordered life for wind generation in establishing the depreciation rate

1 applicable to the facility”. OPC takes issue with the signatories’ usage of the term, “ordered  
2 life” because the Commission orders depreciation rates instead of depreciation lives of the  
3 assets. Additionally, with the listed parameters, the calculation of the depreciation rate or  
4 life may not yield the remaining life based on probable retirement year or average service  
5 life on the depreciation schedule. This is the case based on my review of the *Non-*  
6 *Unanimous Stipulation and Agreement as to Depreciation* filed in Case No. ER-2014-0258  
7 on March 3 2015. Attached as schedule JAR-S-3 is the *ORDER APPROVING*  
8 *STIPULATION AND AGREEMENT AS TO DEPRECIATION* with the associated  
9 Stipulation attached from the 2014 general rate case. During the 2016 rate case depreciation  
10 rates for Ameren Missouri’s remained unchanged.

11 The third issue relates to the net salvage rate or net salvage percentage for the wind assets.  
12 This agreement is silent as to net salvage percentage or net salvage rate applicable to the  
13 life. In order to calculate a depreciation rate, a life or an average service life of the asset is  
14 needed. Furthermore, the net salvage component must be applied over the service life to  
15 determine the final depreciation rate.

16 **Q. You mentioned the ordered life language is ambiguous, and suggested that both the**  
17 **first and second Stipulation and Agreement could be referring to the Empire**  
18 **depreciation rate of 3.33% in Case No. EO-2018-0092. Why would that be a**  
19 **reasonable interpretation of the Stipulation and Agreement?**

20 **A.** That interpretation most reasonably matches the direct testimony of Ameren Missouri. The  
21 Commission agreed with Empire that a 30 year life and no net salvage were reasonable  
22 inputs to arrive at an ordered depreciation rate of 3.33%. Ameren Missouri’s filed  
23 testimony requested a thirty year life, but it did not have much, if any, testimony on its net  
24 salvage value recommendation. As I will discuss later, the OPC believes it would be  
25 reasonable to assume some value for net salvage, which would result in a different  
26 depreciation rate than was ordered in EO-2018-0092. Although a 3.33% depreciation rate  
27 would be the most reasonable interpretation of the Stipulation and Agreement, the OPC  
28 does not believe that would be the most reasonable depreciation rate. Instead, the OPC  
29 recommends 3.66% as will be explained later in this testimony.

1 **Q. What concerns, if any, do you have if the Stipulation and Agreement is referring to**  
 2 **Ameren Missouri's ordered life instead of Empire's ordered rate?**

3 A. As I previously stated, the Stipulation and Agreement fails to discuss an ordered rate.  
 4 Instead, the agreement states that Ameren Missouri shall use the currently ordered life for  
 5 wind generation in establishing the depreciation rate applicable to the facility. However, if  
 6 the parties intent was to settle on Ameren Missouri's ordered depreciation rates, then the  
 7 OPC has several concerns described below.

8 **Q. Does Ameren Missouri have ordered depreciation rates for wind assets?**

9 A. Yes. As Part of Case No. ER-2014-0258, a new account, 344.??<sup>1</sup> Generators – Wind (new  
 10 account assignment), was established. It is important to note that at the time this account  
 11 was created Ameren Missouri, to my knowledge, did not own any wind assets. The  
 12 depreciation rate that was ordered can be found on the attached Schedule JAR-S-3.

13 **Q. What is the ordered depreciation rate for Ameren Missouri's non-existing wind**  
 14 **assets?**

15 A. Below is the only ordered rate and FERC sub-account for wind assets on Ameren  
 16 Missouri's Missouri Jurisdictional regulated books.

<u>DEPRECIABLE GROUP</u>	<u>Probable Retirement Year</u>	<u>Survivor Curve</u>	<u>Net Salvage Rate Percent</u>	<u>Depreciation Rate</u>
344.?? Generators - Wind (new account assignment)	20 yr life	45-R2	(17)	6.81

19 **Q. Is the ordered depreciation rate what was agreed to by Ameren Missouri and Staff of**  
 20 **the Public Service Commission in the first Stipulation?**

21 A. No. Ameren Missouri and Staff agreed to the ordered life for wind assets to be then used  
 22 to determine the depreciation rate for the facility. This same discrepancy persists in the  
 23 second Stipulation.

---

<sup>1</sup> As a former Staff member of the Commission's depreciation group, the question marks behind the decimal means that the subaccount / minor account designation was to be determined by Ameren Missouri.

1 **Q. What “life” has been ordered for Ameren Missouri’s non-existent wind assets?**

2 A. OPC contends that lives of assets are not ordered by the Commission. The Commission  
3 orders depreciation rates, which are based on either remaining life or the average service  
4 life of the assets within an account. Review of the wind generator account inherently  
5 provides two possible answers for the life of the wind assets as currently ordered a 20 year  
6 remaining life or a 45 year average service life based on the survivor curve. However  
7 performing a calculation using the depreciation formula equates to a 17.18 year remaining  
8 life.

$$\text{Depreciation Rate} = \frac{100\% - \% \text{ Net Salvage}}{\text{Average Service Life (years)}}$$

11 In this formula, net salvage equals the gross salvage value of the asset minus  
12 the cost of removing the asset from service.<sup>2</sup> The net salvage percentage is  
13 determined by dividing the net salvage experienced for a period of time by  
14 the original cost of the property retired during that same period of time.<sup>3 4</sup>

15 Additionally, Ameren Missouri’s position in direct was for a 30 year useful life of the wind  
16 assets. Applying the formula above

$$\text{Depreciation Rate} = \frac{100\% - \% \text{ Net Salvage}}{\text{Average Service Life (years)}}$$

$$6.81\% = \frac{100\% - (-17\%)}{\text{Life (years)}}$$

$$6.81\% = \frac{117\%}{\text{Life (years)}}$$

$$\frac{.0681}{1.17} = \frac{1}{\text{Life (years)}}$$

25 *Take the inverse*

$$\frac{1.17}{.0681} = \text{Life (years)}$$

<sup>2</sup> Footnote from Report and Order omitted

<sup>3</sup> Footnote from Report and Order omitted

<sup>4</sup> Language from Third Report and Order in Case No. GR-99-315. Language also found in Report and Order in Case No. ER-2004-0570.

1                   17.18= *Life (years)*

2                   Using 20 year life for the depreciation rate formula using net salvage from ordered  
3                   depreciation schedule equals  $1.17/20$  or 5.85%. In order to properly calculate the  
4                   remaining life rate, the plant in service balance and reserve balances for an account would  
5                   be needed in order to calculate the amount remaining to be collected over the remaining 20  
6                   year life of the asset or assets in the account.

7                   Using the 45 year average service life, as shown in the survivor curve, the depreciation rate  
8                   using net salvage from ordered depreciation schedule equals  $1.17/45$  or 2.60%

9                   As for Ameren Missouri's direct testimony for a life of 30 years, with the current ordered  
10                  net salvage, the resulting depreciation rate is  $1.17/30$  or 3.90%

11 **Q.    What are the ordered depreciation rates for other Missouri investor owned utilities?**

12 A.    The Commission ordered Empire District Electric Company in its Report and Order issued  
13        July 11, 2018, in Case No. EO-2018-0092 to use a composite depreciation rate of 3.33%  
14        for FERC Account 341 through 346.

15        Kansas City Power and Light Company ("KCPL") has depreciation rates ordered for its  
16        owned wind assets for FERC Accounts 341, 344, 345, and 346. Attached as Schedule JAR-  
17        S-4 are the ordered depreciation rates for of KCPL that were ordered in Case No. ER-2016-  
18        0285.<sup>5</sup> The Report and Order in the 2016 KCPL case references Exhibit #200 Appendix III  
19        to the Staff Cost of Service Report.

20 **Q.    What is OPC's position on the correct depreciation rate to apply and to what accounts?**

21 A.    OPC would recommend the new depreciation rate set for this wind project be used for  
22        FERC accounts 341 through 346 with the subaccount designation chosen by Ameren  
23        Missouri. The reasoning behind this is that Ameren Missouri's currently approved  
24        depreciation rate for wind assets only applies to the generator account, but does not  
25        consider any structures or accessory or miscellaneous accounts as are currently ordered for  
26        KCPL and Empire. OPC would recommend a depreciation rate consistent with the Ameren

---

<sup>5</sup> Report and Order in Case No. ER-2016-0285 references Exhibit 200 Appendix III in the case



1 Missouri's direct position of the wind asset life of 30 years or more.<sup>6</sup> OPC recognizes that,  
2 at the end of the wind assets useful life, Ameren Missouri may incur cost of removal or  
3 receive salvage associated with the ultimate retirement and dismantlement of the facilities.  
4 OPC would recommend a net salvage percentage of -10% as a rough starting estimate of  
5 costs or salvage to be incurred. This would be the largest net salvage percentage for wind  
6 assets owned by a Missouri investor owned utility. OPC recommends a depreciation rate  
7 of 3.66% for FERC accounts 341-346 with specific sub-account designation to be  
8 determined by Ameren Missouri for the wind assets associated with this project

9 **Q. Does this conclude your surrebuttal testimony?**

10 **A. Yes, it does.**

---

<sup>6</sup> Ameren Missouri Direct Testimony of Mr. Ajay Arora pg.9 lines 13-17.

## John A. Robinett

I am employed as a Utility Engineering Specialist for The Missouri Office of the Public Counsel (OPC). I began employment with OPC in August of 2016. In May of 2008, I graduated from the University of Missouri-Rolla (now Missouri University of Science and Technology) with a Bachelor of Science degree in Mechanical Engineering.

During my time as an undergraduate, I was employed as an engineering intern for the Missouri Department of Transportation (MoDOT) in their Central Laboratory located in Jefferson City, Missouri for three consecutive summers. During my time with MoDOT, I performed various qualification tests on materials for the Soil, Aggregate, and General Materials sections. A list of duties and tests performed are below:

- Compressive strength testing of 4" and 6" concrete cylinders and fracture analysis
- Graduations of soil, aggregate, and reflective glass beads
- Sample preparations of soil, aggregate, concrete, and steel
- Flat and elongated testing of aggregate
- Micro-deval and LA testing of aggregate
- Bend testing of welded wire and rebar
- Tensile testing of welded, braided cable, and rebar
- Hardness testing of fasteners (plain black and galvanized washers, nuts, and bolts)
- Proof loading and tensile testing of bolts
- Sample collection from active road constructions sites
- Set up and performed the initial testing on a new piece of equipment called a Linear Traverse / Image Analysis
- Wrote operators manual for the Linear Traverse / Image Analysis Machine
- Trained a fulltime employee on how to operate the machine prior to my return to school
- Assisted in batching concrete mixes for testing, mixing the concrete, slump cone testing, percent air testing, and specimen molding of cylinders and beams

Upon graduation, I accepted a position as an Engineer I in the Product Evaluation Group for Hughes Christensen Company, a division of Baker Hughes, Inc. (Baker), an oil field service company. During my employment with Baker, I performed failure analysis on oil field drill bits as well as composed findings reports which were forwarded to the field engineers in order for them to report to the company the conclusions of the failure causes.

I previously was employed as a Utility Engineering Specialist I, II, III for the Missouri Public Service Commission (Commission). My employment with the Commission spanned from April of 2010 to August of 2016. My duties involved analyzing depreciation rates and studies for utility companies and presenting expert testimony in rate cases before the Commission.

**JOHN A. ROBINETT**  
**SUMMARY OF CASE PARTICIPATION**

Listed below are the cases in which I have supplied testimony, comments, and/or depreciation rates accompanied by a signed affidavit.

<b>Company</b>	<b>Case Number</b>	<b>Issue</b>	<b>Party</b>
Spire Missouri East Spire Missouri West	GO-2018-0309 GO-2018-0310	Direct and Live Rebuttal Testimony ISRS	Office of Public Counsel (OPC)
Kansas City Power & Light Company	ER-2018-0145	Direct and Rebuttal, Surrebuttal, and True- up direct Testimony, Depreciation and O&M expense related to retired generation units, ONE CIS Allocation	OPC
Kansas City Power & Light Company Greater Missouri Operations	ER-2018-0146	Direct and Rebuttal, Surrebuttal, and True- up direct Testimony, Depreciation and O&M expense related to retired generation units, ONE CIS Allocation, Removal of Additional Amortization	OPC
Empire District Electric Company	EO-2018-0092	Rebuttal, Surrebuttal, Affidavit in Opposition, additional Affidavit and Live Testimony	OPC
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	GR-2018-0013	Rebuttal and Surrebuttal Testimony depreciation, general plant amortization	OPC
Laclede Gas Company Missouri Gas Energy Spire Missouri East Spire Missouri West	GO-2016-0332 GO-2016-0333 GO-2017-0201 GO-2017-0202 GR-2017-0215 GR-2017-0216	ISRS Over collection of depreciation expense and ROE based on Western District Opinion Docket No. WD80544	OPC

**JOHN A. ROBINETT  
SUMMARY OF CASE PARTICIPATION**

<b>Company</b>	<b>Case Number</b>	<b>Issue</b>	<b>Party</b>
Gascony Water Company, Inc.	WR-2017-0343	Rebuttal, Surrebuttal, and Live Testimony rate base, depreciation NARUC USoA Class designation	OPC
Missouri American Water Company	WR-2017-0285	Direct, Rebuttal, Surrebuttal, and Live Testimony depreciation, ami, negative reserve, Lead Line	OPC
Indian Hills Utility Operating Company, Inc.	WR-2017-0259	Direct, Rebuttal, Surrebuttal, and Live Testimony Rate Base (extension of electric service, leak repairs)	OPC
Laclede Gas Company Missouri Gas Energy	GR-2017-0215 GR-2017-0216	Direct, Rebuttal, Surrebuttal, True-up Rebuttal, and Live Testimony depreciation, retirement work in progress, combined heat and power, ISRS	OPC
Empire District Electric Company	EO-2018-0048	IRP Special issues	OPC
Kansas City Power & Light Company	EO-2018-0046	IRP Special issues	OPC
Kansas City Power & Light Company Greater Missouri Operations	EO-2018-0045	IRP Special issues	OPC
Kansas City Power & Light Company Greater Missouri Operations	EO-2017-0230	2017 IRP annual update comments	OPC
Empire District Electric Company	EO-2017-0065	Direct, Rebuttal, Surrebuttal, and Live Testimony FAC Prudence Review Heat Rate	OPC
Ameren Missouri	ER-2016-0179	Direct, Rebuttal, Testimony Heat Rate Testing & Depreciation	OPC

**JOHN A. ROBINETT  
SUMMARY OF CASE PARTICIPATION**

<b>Company</b>	<b>Case Number</b>	<b>Issue</b>	<b>Party</b>
Kansas City Power & Light Company	ER-2016-0285	Direct, Rebuttal, Surrebuttal, and Live Testimony Heat Rate Testing & Depreciation	OPC
Empire District Electric Company Merger with Liberty	EM-2016-0213	Rebuttal Testimony	Missouri Public Service Commission (MOPSC)
Empire District Electric Company	ER-2016-0023	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Hillcrest Utility Operating Company, Inc.	SR-2016-0065	Depreciation Review	MOPSC
Hillcrest Utility Operating Company, Inc.	WR-2016-0064	Depreciation Review	MOPSC
Missouri American Water Company	WR-2015-0301	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Bilyeu Ridge Water Company, LLC Midland Water Company, Inc. Moore Bend Water Utility, LLC Riverfork Water Company Taney County Water, LLC Valley Woods Utility, LLC(Water) Valley Woods Utility, LLC(Sewer) Consolidated into Ozark International, Inc.	WR-2015-0192 WR-2015-0193 WR-2015-0194 WR-2015-0195 WR-2015-0196 WR-2015-0197 SR-2015-0198 Consolidated into WR-2015-0192	Depreciation Review  *filed depreciation rates not accompanied by signed affidavit	MOPSC
I. H. Utilities, Inc. sale to Indian Hills Utility Operating Company, Inc.	WO-2016-0045	Depreciation Rate Adoption CCN	MOPSC
Missouri American Water Company CCN City of Arnold	SA-2015-0150	Depreciation Rate Adoption CCN	MOPSC
Empire District Electric Company	ER-2014-0351	Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
West 16th Street Sewer Company, W.P.C. Sewer Company, Village Water and Sewer Company, Inc. and Raccoon Creek Utility Operating Company, Inc.	SM-2015-0014	Depreciation Rate Adoption	MOPSC

**JOHN A. ROBINETT  
SUMMARY OF CASE PARTICIPATION**

<b>Company</b>	<b>Case Number</b>	<b>Issue</b>	<b>Party</b>
Brandco Investments LLC and Hillcrest Utility Operating Company, Inc.	WO-2014-0340	Depreciation Rate Adoption, Rebuttal Testimony	MOPSC
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	GR-2014-0152	Direct, Rebuttal, Surrebuttal and Live Testimony	MOPSC
Summit Natural Gas of Missouri, Inc	GR-2014-0086	Depreciation Study, Direct and Rebuttal Testimony	MOPSC
P.C.B., Inc.	SR-2014-0068	Depreciation Review	MOPSC
M.P.B., Inc.	SR-2014-0067	Depreciation Review	MOPSC
Roy-L Utilities	WR-2013-0543	Depreciation Review	MOPSC
Roy-L Utilities	SR-2013-0544	Depreciation Review	MOPSC
Missouri Gas Energy Division of Laclede Gas Company	GR-2014-0007	Depreciation Study, Direct and Rebuttal Testimony	MOPSC
Central Rivers Wastewater Utility, Inc.	SA-2014-00005	Depreciation Rate Adoption	MOPSC
Empire District Electric Company	ER-2012-0345	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Empire District Electric Company	WR-2012-0300	Depreciation Review	MOPSC
Laclede Gas Company	GO-2012-0363	Depreciation Authority Order Rebuttal, Surrebuttal and Live Testimony	MOPSC
Moore Bend Water Company, Inc. sale to Moore Bend Water Utility, LLC (Water)	WM-2012-0335	Depreciation Rate Adoption	MOPSC
Oakbrier Water Company, Inc.	WR-2012-0267	Depreciation Review	MOPSC
Lakeland Heights Water Co., Inc.	WR-2012-0266	Depreciation Review	MOPSC
R.D. Sewer Co., L.L.C.	SR-2012-0263	Depreciation Review	MOPSC
Canyon Treatment Facility, LLC	SA-2010-0219	Depreciation Rate Adoption- CCN	MOPSC
Taney County Water, LLC	WR-2012-0163	Depreciation Review	MOPSC
Sale of Saddlebrooke Water and Sewer Infrastructure, LLC to Missouri American Water Company (Sewer)	SA-2012-0067	Rebuttal Testimony	MOPSC

**JOHN A. ROBINETT**  
**SUMMARY OF CASE PARTICIPATION**

<b>Company</b>	<b>Case Number</b>	<b>Issue</b>	<b>Party</b>
Sale of Saddlebrooke Water and Sewer Infrastructure, LLC to Missouri American Water Company (Water)	WA-2012-0066	Rebuttal Testimony	MOPSC
Midland Water Company, Inc.	WR-2012-0031	Depreciation Review	MOPSC
Sale of KMB Utility Corporation to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Sewer)	SO-2011-0351	Depreciation Rate Adoption	MOPSC
Sale of KMB Utility Corporation to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Water)	WO-2011-0350	Depreciation Rate Adoption	MOPSC
Sale of Noel Water Company, Inc. to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Water)	WO-2011-0328	Depreciation Rate Adoption	MOPSC
Sale of Taney County Utilities Corporation to Taney County Water, LLC (Water)	WM-2011-0143	Depreciation Rate Adoption	MOPSC
Empire District Electric Company	ER-2011-0004	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Rex Deffenderfer Enterprises, Inc.	WR-2011-0056	Depreciation Review	MOPSC
Tri-States Utility, Inc	WR-2011-0037	Depreciation Review	MOPSC
Southern Missouri Gas Company, L.P.	GE-2011-0096	Depreciation Study Waiver	MOPSC
Southern Missouri Gas Company, L.P.	GR-2010-0347	Depreciation Review	MOPSC
KMB Utility Corporation (Sewer)	SR-2010-0346	Depreciation Review	MOPSC
KMB Utility Corporation (Water)	WR-2010-0345	Depreciation Review	MOPSC
Middlefork Water Company	WR-2010-0309	Depreciation Review	MOPSC

**STATE OF MISSOURI  
PUBLIC SERVICE COMMISSION**

At a session of the Public Service Commission held at its office in Jefferson City on the 12<sup>th</sup> day of September, 2018.

In the Matter of the Application of Union Electric	)	
Company d/b/a Ameren Missouri for Permission and	)	<b><u>File No. EA-2018-0202</u></b>
Approval and a Certificate of Convenience and	)	Tariff No. YE-2018-0158
Necessity Authorizing it to Construct a Wind	)	
Generation Facility	)	

**ORDER DENYING PUBLIC COUNSEL'S MOTION TO MODIFY  
PROCEDURAL SCHEDULE**

Issue Date: September 12, 2018

Effective Date: September 12, 2018

Union Electric Company d/b/a Ameren Missouri filed an application on May 21, 2018, seeking a certificate of convenience and necessity (a CCN) to construct and operate a wind generation facility in Schuyler and Adair Counties in Missouri. The application also seeks leave to establish a Renewable Energy Standard Cost Recovery Mechanism (RESRAM) related to the cost of the wind generation project. Ameren Missouri filed direct testimony along with its application and the Commission adopted a procedural schedule that required the parties to file rebuttal testimony on August 17 and surrebuttal and cross-surrebuttal testimony on September 28. An evidentiary hearing is scheduled for October 30 through November 2.

On August 17, Ameren Missouri and Staff filed a non-unanimous stipulation and agreement purporting to resolve all issues in the case. Other parties filed rebuttal testimony on that date. Public Counsel, the Missouri Department of Conservation, and the Missouri Industrial Energy Consumers (MIEC) all filed timely objections to that stipulation and



agreement. Therefore, as provided by Commission Rule 4 CSR 2.115(2)(D), that stipulation and agreement has become merely a position of the signatory parties to which no party is bound. All issues remain for determination after hearing.

On August 20, along with its objection to the stipulation and agreement, Public Counsel filed a motion asking the Commission to modify the procedural schedule to permit Staff and Ameren Missouri to file affidavits, in effect additional testimony, to provide a factual basis as the foundation for their stipulation and agreement. Public Counsel also asks that non-signatory parties be given an opportunity to file supplemental testimony in response to those affidavits, or in support of, or opposition to, the stipulation and agreement.

Ameren Missouri responded to Public Counsel's motion on August 23. Ameren Missouri contends there is no need for any additional affidavits or testimonies to support the stipulation and agreement, as the positions taken in that document are fully supported in the company's prefiled direct testimony. Staff did not respond to Public Counsel's motion.

Public Counsel replied to Ameren Missouri's response on August 31, describing a need for additional evidentiary support for the stipulation and agreement's position regarding the ordered life of the wind generation assets and its effect on the company's depreciation rates. Ameren Missouri responded to Public Counsel's reply on September 10, again contending there is no need to modify the procedural schedule to allow for the filing of additional testimony.

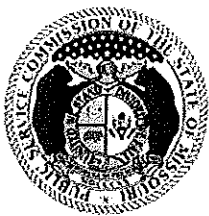
Public Counsel has not provided a sufficient reason to modify the established procedural schedule. The stipulation and agreement has been objected to and, by rule, it is now merely a non-binding position of the signatory parties. Ameren Missouri continues to

bear the burden of proving that it meets each requirement to obtain a CCN and to establish a RESRAM, just as it would have to do if no stipulation and agreement had been filed. Ameren Missouri asserts it can carry that burden without the need to file any supplemental affidavits. Public Counsel may challenge that assertion through its surrebuttal testimony, by cross-examination of Ameren Missouri's witnesses at the hearing, and through the arguments presented in its briefs. There is no reason to modify the procedural schedule to give Ameren Missouri and Staff an opportunity to submit additional affidavits they do not believe they need to submit. There is no need to allow the other parties an opportunity to prefile additional rebuttal testimony regarding the objected-to stipulation and agreement.

The Commission will deny Public Counsel's motion.

**THE COMMISSION ORDERS THAT:**

1. Public Counsel's Motion to Modify Procedural Schedule to Permit Supplemental Testimony is denied.
2. This order shall be effective when issued.



**BY THE COMMISSION**

A handwritten signature in black ink that reads "Morris L. Woodruff".

Morris L. Woodruff  
Secretary

Hall, Chm., Kenney, Rupp, Coleman, and  
Silvey, CC., concur.

Woodruff, Chief Regulatory Law Judge

**STATE OF MISSOURI  
PUBLIC SERVICE COMMISSION**

At a session of the Public Service  
Commission held at its office in  
Jefferson City on the 11<sup>th</sup> day of  
March, 2015.

In the Matter of Union Electric Company, d/b/a	)	<b><u>File No. ER-2014-0258</u></b>
Ameren Missouri's Tariff to Increase Its	)	Tariff No. YE-2015-0003
Revenues for Electric Service	)	

**ORDER APPROVING STIPULATION AND AGREEMENT AS TO  
DEPRECIATION**

Issue Date: March 11, 2015

Effective Date: March 11, 2015

On March 3, 2015, Union Electric Company d/b/a Ameren Missouri, and the Staff of the Commission filed a nonunanimous stipulation and agreement regarding the treatment of depreciation and net salvage.

The stipulation and agreement is nonunanimous in that it was not signed by all parties. However, Commission Rule 4 CSR 240-2.115(2) provides that other parties have seven days in which to object to a nonunanimous stipulation and agreement. If no party files a timely objection to a stipulation and agreement, the Commission may treat it as a unanimous stipulation and agreement. More than seven days have passed since the stipulation and agreement was filed, and no party has objected. Therefore, the Commission will treat the stipulation and agreement as a unanimous stipulation and agreement.

After reviewing the stipulation and agreement, the Commission independently finds and concludes that the stipulation and agreement is a reasonable resolution of the issues

addressed by the stipulation and agreement and that such stipulation and agreement should be approved.

**THE COMMISSION ORDERS THAT:**

1. The Nonunanimous Stipulation and Agreement as to Depreciation, filed on March 3, 2015, is approved as a resolution of the issues addressed in that stipulation and agreement. The signatory parties are ordered to comply with the terms of the stipulation and agreement. A copy of the stipulation and agreement is attached to this order.

2. The depreciation and net salvage rates attached to the stipulation and agreement shall be used for the purpose of setting Ameren Missouri's depreciation and net salvage rates in this case.

3. Ameren Missouri shall investigate the potential salvage value of electric distribution poles and its accounting practices for recording the costs it incurs when it replaces an existing distribution pole, solicit input from Staff on and keep Staff informed of the progress of its investigation, and report the results of its investigation to the Commission by December 31, 2015.

4. Ameren Missouri shall use vintage year amortization for depreciation accruals for the accounts listed in paragraph 2 of the stipulation and agreement, with an effective date contemporaneous with the date the new general rates the Commission orders in this case become effective.

5. Ameren Missouri shall transfer accrued accumulated depreciation reserves between the accounts listed in the table in paragraph 3 of the stipulation and agreement, and from general plant to production account reserves, to address the resulting over-accrual in general plant as of the date it switches from using a mass asset accrual method

to a vintage year amortization method for depreciation accruals for those accounts, as Staff used to create the table in paragraph 4 of the stipulation and agreement, which is based on the amounts on Ameren Missouri's books as of December 31, 2014, as the depreciation reserve over-accrual.

6. The exhibits, or portions of exhibits identified in the stipulation and agreement are admitted into the record.

7. This order shall be effective when issued.



**BY THE COMMISSION**

Morris L. Woodruff  
Secretary

R. Kenney, Chm., Stoll, W. Kenney,  
Hall, and Rupp, CC., concur.

Woodruff, Chief Regulatory Law Judge

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company d/b/a     )  
Ameren Missouri's Tariff to Increase Its         )  
Revenues for Electric Service                    )         Case No. ER-2014-0258

**NON-UNANIMOUS STIPULATION AND  
AGREEMENT AS TO DEPRECIATION**

**COME NOW** the Staff of the Missouri Public Service Commission ("Staff") and Union Electric Company d/b/a Ameren Missouri, and, after discussions among themselves regarding depreciation and net salvage, agree as follows:

1. The Commission should order the attached depreciation and net salvage rates solely for purposes of setting Ameren Missouri's depreciation and net salvage rates in this case.

2. The Commission should order Ameren Missouri to investigate the potential salvage value of electric distribution poles and its accounting practices for recording the costs it incurs when it replaces an existing electric distribution pole, solicit input from Staff on and keep Staff informed of the progress of its investigation, and report the results of its investigation to the Commission by December 31, 2015.

3. The attached depreciation and net salvage rates for the following miscellaneous and general plant equipment accounts are based on Ameren Missouri switching from using a mass asset accrual method to a vintage year amortization method for depreciation accruals, and the Commission should order Ameren Missouri to implement that change in method for the following plant accounts on the date new general rates the Commission orders in this case become effective:

Steam Production Plant		Hydraulic Plant		General Plant	
316.21	Misc - Office Furniture	335.21	Misc - Office Furniture	391	Office Furniture
316.22	Misc - Office Equipment	335.22	Misc - Office Equipment	391.2	PERSONAL COMPUTERS
316.23	Misc - Computers (PCs)	335.23	Misc - Computers (PCs)	391.3	Office Equipment
<b>Nuclear Plant</b>		<b>Other Production plant</b>		393	Stores Equipment
325.21	Misc - Office Furniture	346.21	Misc - Office Furniture	394	Tools, Shop & Garage Equipment
325.22	Misc - Office Equipment	346.22	Misc - Office Equipment	395	Laboratory Equipment
325.23	Misc - Computers (PCs)	346.23	Misc - Computers (PCs)	397	Communications Equipment
				398	Miscellaneous Equipment

4. The Commission should order Ameren Missouri to use the same method for transferring accrued accumulated depreciation reserves between the accounts listed in the table in paragraph 3, and from general plant to production account reserves, to address the resulting over-accrual in general plant as of the date it switches from using a mass asset accrual method to a vintage year amortization method for depreciation accruals for those accounts, as Staff used to create the following table, which is based on the amounts on Ameren Missouri's books as of December 31, 2014:

<b>Vintage General Plant</b>		
<b>Account</b>	<b>Name</b>	<b>Accumulated Reserve Adjustment</b>
391	Office Furniture	-1,556,498
391.1	MAINFRAME COMPUTERS	102,065
391.2	PERSONAL COMPUTERS	-11,403,305
391.3	Office Equipment	-454,199
393	Stores Equipment	-44,567
394	Tools, Shop & Garage Equipment	-414,415
394.5	Training Assets	0
395	Laboratory Equipment	847,585
397	Communications Equipment	-14,190,976
398	Miscellaneous Equipment	35,550
	<b>TOTAL General Plant Adjustment</b>	<b>-27,078,760</b>
<b>To Zero Out Venice Steam Production Plant Reserves</b>		
311	Structures - Venice	9,168,770
312	Boiler Plant Equipment - Venice	8,643,394
314	Turbogenerator Units - Venice	-551,400
316	Misc Power Plant Equip - Venice	116,122
	<b>TOTAL VENICE</b>	<b>17,376,886</b>
<b>To Reduce a Meramec Steam Production Plant Reserve Deficit</b>		
312	Meramec-Boiler Plant Equip	9,701,874

5. If the Commission orders the foregoing, then the issue between Staff and Ameren Missouri listed as depreciation issue B (*What amount of depreciation expense should be included in Ameren Missouri's revenue requirement for Accounts 364 and 369 (minor account 1)?*) that is scheduled to be tried March 4, 2015, is resolved between them, and Ameren Missouri and Staff stipulate to the admission into the evidentiary record in this case the identified parts of the following exhibits:

- Exhibit 24 (Ameren Missouri witness Larry Loos direct testimony);
- Exhibit 27, page 1, line 1 to page 9, line 7 (Ameren Missouri witness Matt Michels surrebuttal testimony);



- Exhibit 43 (Ameren Missouri witness John Spanos direct testimony);
- Exhibit 44 (Ameren Missouri witness John Spanos rebuttal testimony);
- Exhibit 45 (Ameren Missouri witness John Spanos surrebuttal testimony);
- Exhibit 202, page 148, line 9 to page 158, line 13, the accompanying affidavit of Arthur Rice at page 210 of the portable document format of that exhibit, and pages 1-8 of Schedule AWR-1 to Appendix 3 to that exhibit (Staff witness Arthur Rice direct testimony);
- Exhibit 229 (Staff witness Arthur Rice rebuttal testimony),
- Exhibit 230 (Staff witness Arthur Rice surrebuttal testimony); and
- Exhibit 407, page 17, line 14 to page 24, line 2 (Public Counsel witness Ted Robertson rebuttal testimony).

6. This agreement resulted from extensive negotiations, and the terms hereof are interdependent. If the Commission does not approve this agreement without modification, then it shall be void and neither Ameren Missouri nor Staff shall be bound by any of the terms or provisions of it.

7. If the Commission does not unconditionally approve this agreement without modification, and notwithstanding its provision that it shall become void, neither this agreement, nor any matters associated with its consideration by the Commission, shall be considered or argued to be a waiver of the rights that Ameren Missouri or Staff has for a decision in accordance with Section 536.080, RSMo 2000 or Article V, Section 18 of the Missouri Constitution, and Ameren Missouri and Staff shall retain all procedural and due process rights as fully as though this agreement had not been presented for Commission approval, and any suggestions, memoranda, testimony, or

exhibits offered to or received by the Commission in support of this agreement shall become privileged as reflecting the substantive content of settlement discussions and shall be stricken from and not be considered as part of the administrative or evidentiary record before the Commission for any further purpose whatsoever.

8. If the Commission unconditionally accepts the specific terms of this agreement without modification, Ameren Missouri and Staff waive, with respect to the issues resolved herein: their respective rights (1) to call, examine, and cross-examine witnesses pursuant to Section 536.070(2), RSMo 2000; (2) to present oral argument and/or written briefs pursuant to Section 536.080.1, RSMo 2000; (3) to seek rehearing pursuant to Section 386.500, RSMo 2000; and (4) to judicial review pursuant to Section 386.510, RSMo 2000. These waivers apply only to a Commission order respecting this agreement issued in this above-captioned proceeding, and do not apply to any matters raised in any prior or subsequent Commission proceeding, or any matters not explicitly addressed by this agreement. This document contains the entire agreement of the parties concerning the issues addressed herein.

9. This agreement is not a contract with the Commission. Commission acceptance of this agreement shall not be deemed as constituting an agreement on the part of the Commission to forego the use of any discovery, investigative, or other power which the Commission presently has. Thus, nothing in this agreement is intended to impinge or restrict in any manner the exercise by the Commission of any statutory right, including the right to access information, or any statutory obligation.

10. If the Commission has questions for Ameren Missouri or Staff witnesses, Ameren Missouri and Staff will make available, at any on-the-record session, their

witnesses and attorneys on the issues resolved by this agreement, so long as they have adequate notice of that session. Ameren Missouri and Staff agree to cooperate in presenting this agreement to the Commission for approval, and will take no action, direct or indirect, in opposition to the request for approval of this agreement.

**WHEREFORE,** Staff and Ameren Missouri respectfully request that the Commission issue an order directing Ameren Missouri (1) to use the attached depreciation rates; (2) to investigate the potential salvage value of electric distribution poles and its accounting practices for recording the costs it incurs when it replaces an existing electric distribution pole, solicit input from Staff on and keep Staff informed of the progress of its investigation, and report the results of their investigation to the Commission by December 31, 2015; (3) to use vintage year amortization for depreciation accruals for the accounts listed in paragraph 2 above with an effective date contemporaneous with the date the new general rates the Commission orders in this case become effective; (4) to transfer accrued accumulated depreciation reserves between the accounts listed in the table in paragraph 3, and from general plant to production account reserves, to address the resulting over-accrual in general plant as of the date it switches from using a mass asset accrual method to a vintage year amortization method for depreciation accruals for those accounts, as Staff used to create the table in paragraph 4, which is based on the amounts on Ameren Missouri's books, as the depreciation reserve over-accrual; and (5) to admit the above-identified exhibits, or portions of exhibits, into evidence.

Respectfully submitted,

STAFF OF THE MISSOURI PUBLIC  
SERVICE COMMISSION

**/s/ Nathan Williams**

Nathan Williams, MBE #35512  
Deputy Counsel  
Missouri Public Service Commission  
P.O. Box 360  
Jefferson City, MO 65102  
(573) 751-8702  
(573) 751-9285 (Fax)  
nathan.williams@psc.mo.gov

**/s/ Wendy K. Tatro**

Wendy K. Tatro, Bar #60261  
Director and Assistant General Counsel  
Union Electric Company  
d/b/a Ameren Missouri  
P.O. Box 66149 (MC 1310)  
1901 Chouteau Avenue  
St. Louis, MO 63166-6149  
(T) 314-554-3484  
(F) 314-554-4014  
AmerenMOService@ameren.com

SMITH LEWIS, LLP

**/s/ James B. Lowery**

James B. Lowery, #40503  
111 South Ninth Street, Suite 200  
P.O. Box 918  
Columbia, MO 65205-0918  
(573) 443-3141  
(573) 442-6686 (Facsimile)  
lowery@smithlewis.com

Attorneys for Ameren Missouri

**CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or by electronic mail to all counsel of record on this 3<sup>rd</sup> day of March, 2015.

**/s/ Nathan Williams**

AMEREN MISSOURI Case ER-2014-0258 Staff and Ameren Settlement Depreciation Rates

SUMMARY OF ESTIMATED RETIREMENT DATES, SURVIVOR CURVES, NET SALVAGE PERCENT, and ANNUAL DEPRECIATION RATES

<u>DEPRECIABLE GROUP</u>	<u>Probable Retirement Year</u>	<u>Survivor Curve</u>	<u>Net Salvage Rate Percent</u>	<u>Depreciation Rate</u>
<b>STEAM PRODUCTION PLANT</b>				
MERAMEC Steam Production Plant				
311	STRUCTURES AND IMPROVEMENTS	Sep-22	100-R1.5	(1) 4.51
312	BOILER PLANT EQUIPMENT (updated 2/19)	Sep-22	55-R0.5	(5) 7.29
314	TURBOGENERATOR UNITS	Sep-22	60-S0	(2) 5.51
315	ACCESSORY ELECTRIC EQUIPMENT	Sep-22	70-S0	(1) 5.29
316	MISCELLANEOUS POWER PLANT EQUIPMENT	Sep-22	40-L0	0 8.87
316.21	Misc Power Plant - Office Furniture Amortized		20-SQ	5.00
316.22	Misc Power Plant - Office Equipment Amortized		15-SQ	6.67
316.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ	20.00
SIOUX Steam Production Plant				
311	STRUCTURES AND IMPROVEMENTS	Sep-33	100-R1.5	(1) 3.37
312	BOILER PLANT EQUIPMENT	Sep-33	55-R0.5	(5) 4.49
314	TURBOGENERATOR UNITS	Sep-33	60-S0	(2) 3.57
315	ACCESSORY ELECTRIC EQUIPMENT	Sep-33	70-S0	(1) 3.70
316	MISCELLANEOUS POWER PLANT EQUIPMENT	Sep-33	40-L0	0 6.14
316.21	Misc Power Plant - Office Furniture Amortized		20-SQ	5.00
316.22	Misc Power Plant - Office Equipment Amortized		15-SQ	6.67
316.23	Misc Power Plant - Computers Amortized		5-SQ	20.00
Labadie Steam Production Plant				
311	STRUCTURES AND IMPROVEMENTS	Sep-42	100-R1.5	(1) 1.56
312	BOILER PLANT EQUIPMENT	Sep-42	55-R0.5	(5) 2.18
312.3	BOILER PLANT EQUIPMENT - Aluminum Coal Cars		25-R25	25 0.69
314	TURBOGENERATOR UNITS	Sep-42	60-S0	(2) 2.61
315	ACCESSORY ELECTRIC EQUIPMENT	Sep-42	70-S0	(1) 2.20
316	MISCELLANEOUS POWER PLANT EQUIPMENT	Sep-42	40-L0	0 3.83
316.21	Misc Power Plant - Office Furniture Amortized		20-SQ	5.00

<u>DEPRECIABLE GROUP</u>		<u>Probable Retirement Year</u>	<u>Survivor Curve</u>	<u>Net Salvage Rate Percent</u>	<u>Depreciation Rate</u>
316.22	Misc Power Plant - Office Equipment Amortized		15-SQ		6.67
316.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ		20.00
RUSH ISLAND Steam Production Plant					
311	STRUCTURES AND IMPROVEMENTS	Sep-45	100-R1.5	(1)	1.59
312	BOILER PLANT EQUIPMENT	Sep-45	55-R0.5	(5)	2.09
314	TURBOGENERATOR UNITS	Sep-45	60-S0	(2)	2.57
315	ACCESSORY ELECTRIC EQUIPMENT	Sep-45	70-S0	(1)	2.11
316	MISCELLANEOUS POWER PLANT EQUIPMENT	Sep-45	40-L0	0	3.69
316.21	Misc Power Plant - Office Furniture Amortized		20-SQ		5.00
316.22	Misc Power Plant - Office Equipment Amortized		15-SQ		6.67
316.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ		20.00
COMMON - All Steam Plants					
311	STRUCTURES AND IMPROVEMENTS	Sep-42	100-R1.5	(1)	2.66
312	BOILER PLANT EQUIPMENT	Sep-42	55-R0.5	(5)	2.82
315	ACCESSORY ELECTRIC EQUIPMENT	Sep-42	70-S0	(1)	2.78
316	MISCELLANEOUS POWER PLANT EQUIPMENT	Sep-42	40-L0	0	3.88
NUCLEAR PRODUCTION PLANT Callaway					
321	STRUCTURES AND IMPROVEMENTS	Oct-44	100-R1.5	-1	1.37
322	REACTOR PLANT EQUIPMENT	Oct-44	55-R0.5	-6	2.51
323	TURBOGENERATOR UNITS	Oct-44	50-S1	-3	2.45
324	ACCESSORY ELECTRIC EQUIPMENT	Oct-44	80-R2	-1	1.57
325	MISCELLANEOUS POWER PLANT EQUIPMENT	Oct-44	35-L0	0	5.32
325.21	Misc Power Plant - Office Furniture Amortized		20-SQ		5.00
325.22	Misc Power Plant - Office Equipment Amortized		15-SQ		6.67
325.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ		20.00

<u>DEPRECIABLE GROUP</u>	<u>Probable Retirement Year</u>	<u>Survivor Curve</u>	<u>Net Salvage Rate Percent</u>	<u>Depreciation Rate</u>	
<b>Hydraulic Production Plant</b>					
<i>OSAGE</i>					
331	STRUCTURES AND IMPROVEMENTS	Jun-47	130-R1	(3)	2.73
332	RESERVOIRS, DAMS, WATERWAYS	Jun-47	150-R2.5	(1)	1.59
333	WATER WHEELS, TURBINES, GENERATORS	Jun-47	95-S0.5	(14)	2.93
334	ACCESSORY ELECTRIC EQUIPMENT	Jun-47	65-R0.5	(2)	3.43
335	MISCELLANEOUS POWER PLANT EQUIPMENT	Jun-47	55-O1	(2)	3.39
335.21	Misc Power Plant - Office Furniture Amortized		20-SQ		5.00
335.22	Misc Power Plant - Office Equipment Amortized		15-SQ		6.67
335.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ		20.00
336	Roads, Railroads, Bridges	Jun-47	50-R0.5		2.30
<i>KEOKUK</i>					
331	STRUCTURES AND IMPROVEMENTS	Jun-55	130-R1	(1)	1.86
332	RESERVOIRS, DAMS, WATERWAYS	Jun-55	150-R2.5	(6)	1.36
333	WATER WHEELS, TURBINES, GENERATORS	Jun-55	95-S0.5	(3)	2.53
334	ACCESSORY ELECTRIC EQUIPMENT	Jun-55	65-R0.5	(1)	2.50
335	MISCELLANEOUS POWER PLANT EQUIPMENT	Jun-55	55-O1	0	2.90
335.21	Misc Power Plant - Office Furniture Amortized		20-SQ		5.00
335.22	Misc Power Plant - Office Equipment Amortized		15-SQ		6.67
335.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ		20.00
336	Roads, Railroads, Bridges	Jun-55	50-R0.5		1.16
<i>TAUM SAUK</i>					
331	STRUCTURES AND IMPROVEMENTS	Jun-89	130-R1	(1)	1.37
332	RESERVOIRS, DAMS, WATERWAYS	Jun-89	150-R2.5	(6)	2.39
333	WATER WHEELS, TURBINES, GENERATORS	Jun-89	95-S0.5	(3)	1.52
334	ACCESSORY ELECTRIC EQUIPMENT	Jun-89	65-R0.5	(1)	1.83
335	MISCELLANEOUS POWER PLANT EQUIPMENT	Jun-89	55-O1	0	2.28
335.21	Misc Power Plant - Office Furniture Amortized		20-SQ	0	5.00

<u>DEPRECIABLE GROUP</u>		<u>Probable Retirement Year</u>	<u>Survivor Curve</u>	<u>Net Salvage Rate Percent</u>	<u>Depreciation Rate</u>
335.22	Misc Power Plant - Office Equipment Amortized		15-SQ	0	6.67
335.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ	0	20.00
336	Roads, Railroads, Bridges	Jun-89	50-R0.5	0	1.47
<b>OTHER PRODUCTION</b>					
341	STRUCTURES AND IMPROVEMENTS		40-R2.5	(5)	2.48
342	FUEL HOLDER, PRODUCRES, ACCESSORIES		40-R3	(5)	2.60
344	GENERATORS				
	Generators - CTGs		40-R4	(5)	1.93
344.??	Generator - Landfill CTG		6-S2	40	10.66
344.??	Generators - Solar		20-S2.5	0	5.12
344.??	Generators - Wind (new account asslgnment)	20 yr life	45-R2	(17)	6.81
345	ACCESSORY ELECTRIC EQUIPMENT		35-R2.5	(5)	3.23
346	MISCELLANEOUS POWER PLANT EQUIPMENT		20-L2.5	(5)	7.88
346.21	Misc Power Plant - Office Furniture Amortized		20-SQ	0	5.00
346.22	Misc Power Plant - Office Equipment Amortized		15-SQ	0	6.67
346.23	Misc Power Plant - Computers (PCs) Amortized		5-SQ	0	20.00
<b>TRANSMISSION PLANT</b>					
352	STRUCTURES AND IMPROVEMENTS		60-R2.5	(5)	1.86
353	STATION EQUIPMENT		60-R2.5	(5)	1.67
354	TOWERS AND FIXTURES		70-R4	(30)	1.94
355	POLES AND FIXTURES		58-R4	(100)	3.78
356	OVERHEAD CONDUCTORS AND DEVICES		58-R4	(25)	2.54
359	ROADS AND TRAILS		70-R4	0	1.09
<b>DISTRIBUTION PLANT</b>					
361	STRUCTURES AND IMPROVEMENTS		60-R2.5	(5)	1.79
362	STATION EQUIPMENT		60-R2.5	(5)	1.69
363	ENERGY STORAGE EQUIPMENT (new assignment)		10-L3	0	11.76
364	POLES AND FIXTURES	Settled Issue	47-R2.5	(150)	5.03
365	OVERHEAD CONDUCTORS AND DEVICES		50-R1	(50)	3.00
366	UBDERGROUND CONDUIT		70-R3	(50)	2.13
367	UBDERGROUND CONDUCTORS AND DEVICES		56-R2	(25)	2.19
368	LINE TRANSFORMER		41-R2.5	5	2.36
369.01	OVERHEAD SERVICES	Settled Issue	43-R2.5	(150)	4.05



<u>DEPRECIABLE GROUP</u>		<u>Probable Retirement Year</u>	<u>Survivor Curve</u>	<u>Net Salvage Rate Percent</u>	<u>Depreciation Rate</u>
369.02	UNDERGROUND SERVICES		55-R3	(90)	3.21
370	METERS		26-S0.5	0	3.97
371	INSTALLATION ON CUSTOMERS' PREMISES		25-O1	0	0.03
373	STREET LIGHTING AND SIGNAL SYSTEMS		36-S0	(40)	3.33
<b>GENERAL PLANT</b>					
390	STRUCTURES AND IMPROVEMENTS				
	MISCELLANEOUS STRUCTURES - OLD		55-R1.5	(5)	1.91
	LARGE STRUCTURES		48-R1.5	(10)	2.30
390.05	STRUCTURES AND IMPROVE - TRAINING ASSETS		5-SQ	0	20.00
391	Office Furniture Amortized		20-SQ	0	5.00
391.1	MAINFRAME COMPUTERS		5-SQ	0	0.00
391.2	PERSONAL COMPUTERS Amortized		5-SQ	0	20.00
391.3	Office Equipment Amortized		15-SQ	0	6.67
392	TRANSPORTATION EQUIPMENT		11-R1.5	10	8.00
392.05	TRANSPORTATION EQUIPMENT - TRAINING ASSETS		5-SQ	0	20.00
393	Stores Equipment Amortized		20-SQ	0	5.00
394	Tools, Shop & Garage Equipment Amortized		20-SQ	0	5.00
394.05	Tools, Shop & Garage Equip - Training Assets		5-SQ	0	20.00
395	Laboratory Equipment Amortized		20-SQ	0	5.00
396	Power Operated Equipment		15-L2	15	6.15
397	Communications Equipment Amortized		15-SQ	0	6.67
397.05	Communications Equip - Training Assets		5-SQ	0	20.00
398	Miscellaneous Equipment Amortized		20-SQ	0	5.00
<b>TOTAL DEPRECIABLE ELECTRIC PLANT</b>					<b>2.97</b>

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**



In the Matter of Kansas City Power & Light	)	<b><u>File No. ER-2016-0285</u></b>
Company's Request for Authority to Implement a	)	Tariff No. YE-2017-0004
General Rate Increase for Electric Service	)	Tariff No. YE-2017-0005

---

**REPORT AND ORDER**

---

**Issue Date:** May 3, 2017

**Effective Date:** May 13, 2017

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Kansas City Power & Light ) File No. ER-2016-0285  
Company's Request for Authority to Implement a ) Tariff No. YE-2017-0004  
General Rate Increase for Electric Service ) Tariff No. YE-2017-0005

**REPORT AND ORDER**

**TABLE OF CONTENTS**

<b>APPEARANCES .....</b>	<b>2</b>
<b>I. Procedural History .....</b>	<b>4</b>
A. Tariff Filings, Notice, and Intervention .....	4
B. Local Public Hearings .....	4
C. Stipulations and Agreements .....	4
D. Evidentiary Hearing .....	5
E. Case Submission .....	5
<b>II. General Matters .....</b>	<b>6</b>
A. General Findings of Fact .....	6
B. General Conclusions of Law .....	9
<b>III. Disputed Issues .....</b>	<b>12</b>
A. Commission issues .....	12
B. Cost of capital .....	15
C. Fuel adjustment clause .....	23
D. Depreciation .....	35
E. Revenues .....	38
F. Clean Charge Network .....	42
G. Customer Experience .....	47
H. Rate Design .....	48
I. True-Up issues .....	57
<b>ORDERED PARAGRAPHS .....</b>	<b>63</b>

86. The current practice which KCPL proposes to continue allows OPC, Staff or any “party other than the Company” to challenge a new schedule or charge type, and to even include its own charge type in the tariff.<sup>115</sup>

### **Conclusions of Law**

No additional Conclusions of Law are required for this issue.

### **Decision**

The Commission concludes that it should continue the current practice of allowing KCPL to add cost and revenue types to its FAC between rate cases according to its current FAC tariff. This does not authorize KCPL to add new types of costs or revenues between rate cases, but designations for those costs or revenues may be updated as necessary.

#### **D. Depreciation**

1. *Should the Commission allow terminal net salvage in the calculation of KCPL’s depreciation rates?*

2. *What depreciation rates should the Commission order KCPL to use?*

### **Findings of Fact**

87. Depreciation refers to the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes that can be reasonably anticipated or contemplated, against which the company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements,

---

<sup>115</sup> Ex. 142, Sch. TMR-3, pp. 6, 16.

inadequacy, obsolescence, changes in the art, changes in demand and the requirements of public authorities.<sup>116</sup>

88. Net salvage is a component in calculating depreciation that represents the value of equipment and materials recovered during retirements, net of the cost of removing them.<sup>117</sup>

89. Gross salvage is the amount recorded for the property retired due to the sale, reimbursement, or reuse of the property.<sup>118</sup>

90. Cost of removal is the cost incurred in connection with the retirement from service, and the disposition of, depreciable plant.<sup>119</sup>

91. Terminal net salvage is the ultimate retirement of plant facilities, including associated gross salvage and cost of removal. In this case, an additional distinction has been made within terminal net salvage between retirement and dismantlement. Retirement, in this context, is associated with the removal of a unit from service. It includes the costs associated with shutting a unit down, rendering it safe, and complying with regulatory requirements for the closure of the unit. Dismantlement refers to the demolition of a unit. The current depreciation rates that the Commission approved for KCPL in Case No. ER-2014-0307 do not include terminal net salvage.<sup>120</sup>

92. Terminal net salvage is distinguished from interim net salvage. Interim net salvage is associated with the removal from service of units of property from a works or

---

<sup>116</sup> Ex. 145, p. 4.

<sup>117</sup> Ex. 223, p. 1.

<sup>118</sup> *Id.* at 2.

<sup>119</sup> *Id.*

<sup>120</sup> *Id.* at 2-3.

system during the life of the overall unit. The current depreciation rates include interim net salvage.<sup>121</sup>

93. The amount in question in this case is the cost to retire production plants from service, not including any cost to actually dismantle them.<sup>122</sup>

94. KCPL argues that excluding terminal net salvage would result in intergenerational inequities. These inequities would occur because ratepayers getting the benefit of the asset today would not pay terminal net salvage, but ratepayers not getting the benefit of the asset after it is retired would have to pay the terminal net salvage.<sup>123</sup>

95. Terminal net salvage should not be included in depreciation rates because the actual cost KCPL will incur is unknown, cannot be measured, and is speculative.<sup>124</sup>

96. The Commission has previously excluded terminal net salvage from rates for exactly that reason.<sup>125</sup>

97. Nothing has changed in the interim and there is no good reason to admit costs for terminal net salvage to rates now.<sup>126</sup>

98. As with any speculative cost, if the amount accrued for retirement during the plant's operation in fact exceeds the actual cost of that retirement, there will be no feasible way to return that money to the ratepayers that paid too much.<sup>127</sup>

---

<sup>121</sup> *Id.* at 3.

<sup>122</sup> *Id.* at 3.

<sup>123</sup> Tr. Vol.8, pp. 328-29.

<sup>124</sup> Ex. 223, pp. 4, 8; Tr. Vol. 8, p. 336, 350, 363-64.

<sup>125</sup> Ex. 233, p. 4.

<sup>126</sup> Tr. Vol. 8, pp. 353-54.

<sup>127</sup> *Id.* at 364-65.

99. Due to the Commission's decision to exclude terminal net salvage, the Commission finds that Staff's depreciation rates, which also exclude terminal net salvage, are the most appropriate.<sup>128</sup>

### **Conclusions of Law**

No additional Conclusions of Law are required for this issue.

### **Decision**

Because the cost of terminal net salvage is speculative, the Commission will not allow KCPL to recover those costs in this case. Staff's depreciation rates, which exclude terminal net salvage, are the appropriate rates.

#### **E. Revenues**

1. *Should KCPL be permitted to make an adjustment to annualize kWh sales in this rate case as a result of KCPL's Missouri Energy Efficiency Investment Act ("MEEIA") Cycle 1 demand-side programs?*
2. *How should the Large Power class kW demand billing units be adjusted when a customer leaves the Large Power class?*
3. *How should customers who left the Large Power class and switched into the Large General Service and Medium General Service classes be annualized?*
4. *What methodology should be utilized to measure customer growth?*<sup>129</sup>

### **Findings of Fact**

100. In 2014, KCPL filed for Commission approval of its MEEIA Cycle 1 energy efficiency programs. In addition, KCPL filed for approval of its Demand Side Investment

---

<sup>128</sup> Ex. 200, pp. 147-48; Ex. 200, App. 3, Sch. KBP-d.

<sup>129</sup> Per KCPL's brief, Issues V.B., C., and D. are no longer contested, and, thus, the Commission will not address those sub-issues.

Staff Exhibit No. 200  
Jefferson City, Missouri, dated 2-28-17 Reported by KF  
November 2016  
File No. ER-2016-0285

CASE NO. ER-2016-0285

KANSAS CITY POWER & LIGHT COMPANY

APPENDICES 1-3

REVENUE REQUIREMENT  
COST OF SERVICE

STAFF REPORT

MISSOURI PUBLIC SERVICE COMMISSION



KCP&L Case No. ER-2016-0285 Staff's Recommended Depreciation Rates, Update 11/22/2016

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>PRODUCTION PLANT</b>						
<b>STEAM PRODUCTION PLANT</b>						
311.00	<b>STRUCTURES AND IMPROVEMENTS</b>				39.7	1.65
	HAWTHORN COMMON	Jun-55	100-S0.5	(4)	39.3	
	HAWTHORN UNIT 5	Jun-55	100-S0.5	(6)	38.2	
	HAWTHORN UNIT 9	Jun-45	100-S0.5	(3)	30.2	
	MONTROSE COMMON	Jun-21	100-S0.5	(1)	7.5	
	MONTROSE UNIT 2	Jun-21	100-S0.5	0		
	MONTROSE UNIT 3	Jun-21	100-S0.5	0		
	IATAN COMMON	Jun-70	100-S0.5	(7)	52.0	
	IATAN UNIT 1	Jun-40	100-S0.5	(3)	25.8	
	LACYGNE COMMON	Jun-40	100-S0.5	(2)	25.9	
	LACYGNE UNIT 1	Jun-40	100-S0.5	(4)	25.5	
	LACYGNE UNIT 2	Jun-40	100-S0.5	(3)	25.7	
	MISCELLANEOUS		100-S0.5	(20)	98.1	
312.00	<b>BOILER PLANT EQUIPMENT</b>				24.6	2.73
	HAWTHORN COMMON	Jun-55	55-R1	(6)	35.7	
	HAWTHORN UNIT 5	Jun-55	55-R1	(8)	34.7	
	HAWTHORN UNIT 9	Jun-45	55-R1	(6)	27.4	
	MONTROSE COMMON	Jun-21	55-R1	(1)	7.3	
	MONTROSE UNIT 2	Jun-21	55-R1	(1)	7.3	
	MONTROSE UNIT 3	Jun-21	55-R1	(1)	7.3	
	IATAN COMMON	Jun-70	55-R1	(11)	43.1	
	IATAN UNIT 1	Jun-40	55-R1	(5)	23.9	
	LACYGNE COMMON	Jun-40	55-R1	(5)	23.9	
	LACYGNE UNIT 1	Jun-40	55-R1	(5)	23.9	
	LACYGNE UNIT 2	Jun-40	55-R1	(7)	23.1	
	MISCELLANEOUS		55-R1	(20)		
	LACYGNE ENVIRONMENTAL EQUIP - 2015	Jun-40	55-R1	(3)	22.8	
312.01	<b>BOILER PLANT EQUIPMENT - UNIT TRAINS</b>		25-R2.5	25	18.2	2.77
312.02	<b>BOILER PLANT EQUIPMENT- AQC</b>				22.2	1.56
	HAWTHORN UNIT 5	Jun-55	55-R1	(7)	33.8	
	LACYGNE UNIT 1	Jun-55	55-R2	(7)	22.2	
314.00	<b>TURBOGENERATOR UNITS</b>				23.7	2.14
	HAWTHORN COMMON	Jun-55	60-R1.5	(4)	37.2	
	HAWTHORN UNIT 5	Jun-55	60-R1.5	(6)	34.5	
	HAWTHORN UNIT 9	Jun-45	60-R1.5	(3)	28.5	
	MONTROSE COMMON	Jun-21	60-R1.5	0	7.4	
	MONTROSE UNIT 2	Jun-21	60-R1.5	(1)	7.4	
	MONTROSE UNIT 3	Jun-21	60-R1.5	(1)	7.4	
	IATAN COMMON	Jun-70	60-R1.5	(7)	46.4	
	IATAN UNIT 1	Jun-40	60-R1.5	(4)	24.0	
	LACYGNE COMMON	Jun-40	60-R1.5	(3)	24.3	
	LACYGNE UNIT 1	Jun-40	60-R1.5	(4)	23.9	
	LACYGNE UNIT 2	Jun-40	60-R1.5	(5)	23.3	
	MISCELLANEOUS		60-R1.5	(15)		

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
315.00	<b>ACCESSORY ELECTRIC EQUIPMENT</b>				21.6	3.22
	HAWTHORN COMMON	Jun-55	55-S0.5	(6)	35.2	
	HAWTHORN UNIT 5	Jun-55	55-S0.5	(6)	34.2	
	HAWTHORN UNIT 9	Jun-45	55-S0.5	(5)	27.4	
	MONTROSE COMMON	Jun-21	55-S0.5	(1)	7.3	
	MONTROSE UNIT 2	Jun-21	55-S0.5	(1)	7.3	
	MONTROSE UNIT 3	Jun-21	55-S0.5	(1)	7.3	
	IATAN COMMON	Jun-70	55-S0.5	(9)	43.6	
	IATAN UNIT 1	Jun-40	55-S0.5	(4)	23.5	
	LACYGNE COMMON	Jun-40	55-S0.5	(4)	23.2	
	LACYGNE UNIT 1	Jun-40	55-S0.5	(5)	22.9	
	LACYGNE UNIT 2	Jun-40	55-S0.5	(4)	23.7	
	LACYGNE ENVIRONMENTAL EQUIP - 2015	Jul-40	55-S0.5	(2)	23.4	
	MISCELLANEOUS		55-S0.5	(10)	48.5	
316.00	<b>MISCELLANEOUS POWER PLANT EQUIP</b>				27.3	2.28
	HAWTHORN COMMON	Jun-55	55-S0.5	0	35.1	
	HAWTHORN UNIT 5	Jun-55	55-S0.5	0	31.0	
	HAWTHORN UNIT 9	Jun-45	55-S0.5	0	27.1	
	MONTROSE COMMON	Jun-21	55-S0.5	0	7.4	
	MONTROSE UNIT 2	Jun-21	55-S0.5	0		
	MONTROSE UNIT 3	Jun-21	55-S0.5	0		
	IATAN COMMON	Jun-70	55-S0.5	0	41.7	
	IATAN UNIT 1	Jun-40	55-S0.5	0	24.1	
	LACYGNE COMMON	Jun-40	55-S0.5	0	24.4	
	LACYGNE UNIT 1	Jun-40	55-S0.5	0	23.8	
	LACYGNE UNIT 2	Jun-40	55-S0.5	0	22.2	
	MISCELLANEOUS		55-S0.5	0	48.5	
	<b>HAWTHORN UNIT 5 REBUILD</b>					
311.02	STRUCTURES AND IMPROVEMENTS	Jun-55	100-S0.5	(5)	38.9	0.30
312.03	BOILER PLANT EQUIPMENT	Jun-55	55-R1	(8)	34.0	0.56
315.01	ACCESSORY ELECTRIC EQUIPMENT	Jun-55	55-S0.5	(9)	33.3	0.59
316.01	MISCELLANEOUS POWER PLANT EQUIP	Jun-55	55-S0.5	0	33.3	0.34
	<b>IATAN UNIT 2</b>					
311.04	STRUCTURES AND IMPROVEMENTS	Jun-70	100-S0.5	(6)	52.4	1.16
312.04	BOILER PLANT EQUIPMENT	Jun-70	55-R1	(10)	44.1	1.38
314.04	TURBOGENERATOR UNITS	Jun-70	60-R1.5	(7)	46.7	1.87
315.04	ACCESSORY ELECTRIC EQUIPMENT	Jun-70	55-S0.5	(8)	44.1	1.87
316.04	MISCELLANEOUS POWER PLANT EQUIP	Jun-70	55-S0.5	0	44.1	1.35
	<b>NUCLEAR PRODUCTION PLANT</b>					
321.00	STRUCTURES AND IMPROVEMENTS	Jun-45	100-S0.5	(1)	29.3	1.30
322.00	REACTOR PLANT EQUIPMENT	Jun-45	60-R2	(2)	27.3	1.58
323.00	TURBOGENERATOR UNITS	Jun-45	50-S1.5	(1)	26.2	2.25
324.00	ACCESSORY ELECTRIC EQUIPMENT	Jun-45	50-S1.5	0	23.0	2.12
325.00	MISCELLANEOUS POWER PLANT EQUIP	Jun-45	40-R0.5	0	23.9	3.16
328.00	REGULATORY DISALLOWANCES					1.60

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>OTHER PRODUCTION PLANT</b>						
341.00	<b>STRUCTURES AND IMPROVEMENTS</b>				30.8	2.56
	NORTHEAST COMBUSTION TURBINES	Jun-40	70-R2.5	(1)	25.4	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	70-R2.5	(1)	33.0	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	70-R2.5	(1)	32.8	
	HAWTHORN UNIT 6	Jun-45	70-R2.5	(1)	30.0	
	HAWTHORN UNIT 7	Jun-45	70-R2.5	(1)	30.0	
	HAWTHORN UNIT 8	Jun-45	70-R2.5	(1)	30.0	
342.00	<b>FUEL HOLDERS, PRODUCERS &amp; ACCESSORIES</b>				28.4	2.11
	NORTHEAST COMBUSTION TURBINES	Jun-40	50-R2.5	(4)	24.4	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	50-R2.5	(3)	30.7	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	50-R2.5	(3)	30.6	
	HAWTHORN UNIT 6	Jun-45	50-R2.5	(3)	28.1	
	HAWTHORN UNIT 7	Jun-45	50-R2.5	(3)	27.9	
	HAWTHORN UNIT 8	Jun-45	50-R2.5	(3)	27.9	
344.00	<b>GENERATORS</b>				28.4	2.00
	NORTHEAST COMBUSTION TURBINES	Jun-40	50-R1.5	(5)	22.3	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	50-R1.5	(3)	29.6	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	50-R1.5	(3)	29.6	
	HAWTHORN UNIT 6	Jun-45	50-R1.5	(3)	27.8	
	HAWTHORN UNIT 7	Jun-45	50-R1.5	(3)	27.1	
	HAWTHORN UNIT 8	Jun-45	50-R1.5	(3)	27.1	
345.00	<b>ACCESSORY ELECTRIC EQUIPMENT</b>				27.2	1.84
	NORTHEAST COMBUSTION TURBINES	Jun-40	45-R3	(8)	18.7	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	45-R3	(4)	29.9	
	MIAMI COUNTY COMBUSTION TURBINES	Jun-48	45-R3	(4)	29.9	
	HAWTHORN UNIT 6	Jun-45	45-R3	(4)	27.4	
	HAWTHORN UNIT 7	Jun-45	45-R3	(4)	27.4	
	HAWTHORN UNIT 8	Jun-45	45-R3	(4)	27.5	
346.00	<b>MISCELLANEOUS POWER PLANT EQUIPMENT</b>				23.6	4.19
	NORTHEAST COMBUSTION TURBINES	Jun-40	45-R2.5	0	23.3	
	WEST GARDNER COMBUSTION TURBINES	Jun-48	45-R2.5	0	31.8	

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>SOLAR PRODUCTION PLANT</b>						
344.01	GENERATORS - SOLAR	Jun-33	45-R2	0	18.80	4.82
<b>GREENWOOD SOLAR FACILITY (FROM ER-2016-0156 ORDERED RATES)</b>						
341.00	STRUCTURES AND IMPROVEMENTS					5.26
344.01	GENERATORS					5.52
345.00	ACCESSORY ELECTRICAL EQUIPMENT					5.38
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT					5.19
<b>WIND PRODUCTION PLANT</b>						
341.02	STRUCTURES AND IMPROVEMENTS				16.3	4.31
	SPEARVILLE UNIT 1	Jun-30	70-R2.5	0	16.3	
	SPEARVILLE UNIT 2	Jun-30	70-R2.6	0	16.3	
344.02	GENERATORS				13.6	5.39
	SPEARVILLE COMMON	Jun-30	45-R2	0	15.9	
	SPEARVILLE UNIT 1	Jun-26	45-R2	(1)	12.1	
	SPEARVILLE UNIT 2	Jun-30	45-R2	(1)	16.0	
345.02	ACCESSORY ELECTRIC EQUIPMENT				15.4	6.07
	SPEARVILLE COMMON	Jun-30	40-R2.5	0	16.1	
	SPEARVILLE UNIT 1	Jun-26	40-R2.5	0	12.2	
346.02	MISCELLANEOUS POWER PLANT EQUIPMENT				18.0	5.00
	SPEARVILLE COMMON	Jun-30	35-S2.5	0	18.0	5.00

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) [Interim Only]	Composite Remaining Life	Depreciation Rate (%)
<b>TRANSMISSION PLANT</b>						
352.00	STRUCTURES AND IMPROVEMENTS		60-R3	(5)	37.8	1.98
353.00	STATION EQUIPMENT		55-R1	(10)	44.2	1.87
353.03	STATION EQUIPMENT- COMMUNICATION		25-S2.5	0	5.9	9.96
354.00	TOWERS AND FIXTURES		70-R4	(20)	38.4	0.88
355.00	POLES AND FIXTURES		52-R2	(50)	38.0	2.64
356.00	OVERHEAD CONDUCTORS AND DEVICES		55-R2.5	(25)	41.6	1.78
357.00	UNDERGROUND CONDUIT		65-R4	0	32.0	1.41
358.00	UNDERGROUND CONDUCTORS AND DEVICES		55-R4	0	28.8	0.68
<b>DISTRIBUTION PLANT</b>						
361.00	STRUCTURES AND IMPROVEMENTS		55-R2	(5)	41.3	1.32
362.00	STATION EQUIPMENT		52-R2	(5)	39.1	1.81
362.03	STATION EQUIPMENT- COMMUNICATION		25-S2.5	0	9.6	4.45
363.00	STORAGE BATTERY EQUIPMENT		30-L3	0	8.5	11.76
364.00	POLES, TOWERS AND FIXTURES		42-R2.5	(50)	29.3	3.37
365.00	OVERHEAD CONDUCTORS AND DEVICES		44-R1	(25)	31.4	3.08
366.00	UNDERGROUND CONDUIT		55-R2.5	(30)	38.0	2.91
367.00	UNDERGROUND CONDUCTORS AND DEVICES		51-R1.5	(10)	38.8	2.38
368.00	LINE TRANSFORMERS		37-R2	10	27.4	1.63
369.00	SERVICES		50-R2.5	(100)	34.0	4.44
370.00	METERS		40-R1.5	2	34.6	0.61
370.10	METERS-AMR (Auto Meter Read)	Jun-16	40-R1.5	2	33.8	0.00
370.20	METERS -AMI (Advanced Meter Infrastructure)		20-S2.5	2	19.5	4.91
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES		21-S1	(15)	20.5	0.05
373.00	STREET LIGHTING AND SIGNAL SYSTEMS		25-I0.5	(5)	18.4	3.75

Account	Description	Probable Retirement Date	Survivor Curve	Net Salvage (%) (Interim Only)	Composite Remaining Life	Depreciation Rate (%)
<b>GENERAL PLANT</b>						
390.00	STRUCTURES AND IMPROVEMENTS		45-R1.5	{20}	33.0	2.75
391.01	FURNITURE AND EQUIPMENT		20-SQ	0	11.9	5.00
391.01	FURNITURE AND EQUIP- WOLF CREEK		20-SQ	0	13.5	5.00
391.02	COMPUTER EQUIPMENT		8-SQ	0	5.3	12.50
<b>TRANSPORTATION EQUIPMENT</b>						
392.00	AUTOS		8-R2	25	0.0	9.38
392.01	LIGHT TRUCKS		7.5-10.5	25	5.0	11.73
392.02	HEAVY TRUCKS		10-12.5	25	6.1	9.94
392.03	TRACTORS		12-R2	25	4.9	5.68
392.04	TRAILERS		26-S0	25	21.5	1.36
393.00	STORES EQUIPMENT		25-SQ	0	14.1	4.00
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		30-SQ	0	17.9	3.33
395.00	LABORATORY EQUIPMENT		30-SQ	0	17.8	3.33
396.00	POWER OPERATED EQUIPMENT		12-L2	15	7.6	7.94
397.00	COMMUNICATION EQUIPMENT		35-SQ	0	22.1	2.86
398.00	MISCELLANEOUS EQUIPMENT		30-SQ	0	17.0	3.33